

## AMENDMENTS

### In the Claims:

Please cancel Claim 5 without prejudice or disclaimer as to future prosecution. Please replace Claims 2, 3, and 11-13 with the following claims –

2. (Amended) The method according to claim 1, further comprising the step of collimating using a collimator with a collimator slot to prevent the incident radiation from hitting the edge of the detector.

3. (Amended) An apparatus for detection of incident radiation in radiographic imaging applications ranging from about 10 keV to about 50 keV, the apparatus comprising:

an X-ray detector able to be oriented relative to the incident radiation, said detector having a plurality of semiconductor X-ray strips arranged on a substrate, said detector being of sufficient height such that substantially all of the incident radiation dissipates within said detector,

electrical outputs for each of the strips, and

electrical connections between each of the semiconductor X-ray strips such that the output corresponding to corresponding points in each of the strips is combined,

wherein said X-ray detector is oriented relative to the incident radiation at an acute angle between a direction of said incident radiation and a side of said detector of said sufficient height such that incident radiation mainly hits the side of said detector, said angle being less than ten (10) degrees, and

wherein the area exposed to the incident radiation excludes at least one section of said strip between at least one edge of said detector and at least one active sensor area.

11. (Amended) An apparatus according to claim 3 wherein said detector is able to be oriented such that said incident radiation hits a backside of said detector.

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12. (Amended) An apparatus according to claim 3, wherein the apparatus is used in scanned-slot medical imaging for detection of incident radiation.

13. (Amended) An apparatus according to claim 12, wherein the use for said medical imaging is selected from the group consisting of mammography, bone densitometry and non-destructive testing.